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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 01212004

Application Number: 09/904,831

Filing Date: July 16, 2001

Appellant(s): METTRIE ET AL.

Thalia V. Warnement
For Appellant

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EXAMINER'S ANSWER

This is in response to the appeal brief filed November 4, 2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments*

The appellant's statement of the status of amendments contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 30-34 and 37-71 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *ClaimsAppealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

5,700,456

DUBIEF et al.

12-1997

International Cosmetic Ingredient Dictionary, fifth edition, 1993, vol. 1, page 110.

(10) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claims 30-34 and 37-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubief et al. (US Patent No. 7,700,456), hereinafter “Dubief” in view of *International Cosmetic Ingredient Dictionary*.

Dubief teaches hair treating compositions which contain at least one ceramide and/or glycoceramide, and at least one cationic polymer (see abstract). The cationic polymers may be of formula (III), which encompasses those of formulae (IV) and (V) as claimed (see col. 3, lines 43-52). The compositions may also contain thickening agents like NATROSOL PLUS (see col. 8, lines 36-45). Dubief also teaches that the compositions may also be used for the dyeing of keratinous fibers such as hair, in which case they contain oxidation dyes and/or direct dyes (see col. 9, lines 18-25). Dubief also teaches that the products can also be in the form of thickened liquids (see col. 9, lines 32-34). Dubief also teaches that the pH of the compositions is generally

from 2 to 9 (see col. 8, lines 58-61). In Example 6, Dubief teaches a cream oxidation hair dyeing composition which contains a p-phenylenediamine oxidation base, m-phenylenediamine coupler, a cationic polymer as claimed in claim 46, and a reducing agent (sodium sulfite), wherein each component is present in the claimed amounts. The composition is mixed with an oxidant containing 20-volumes of hydrogen peroxide, and the mixture is applied to the hair in a hair dyeing process as claimed. Dubief, however, does not specifically teach (1) the claimed nonionic amphiphilic polymer to both the dye- and oxidant-containing compositions, their proportions, and (2) multi-compartment kits.

The *International Cosmetic Ingredient Dictionary* teaches that NATROSOL PLUS is cetyl (i.e. C₁₆) modified hydroxyethyl cellulose (see page 110, “cetyl hydroxyethylcellulose” entry).

With respect to difference (1), it would have been obvious to one of ordinary skill in the art at the time the invention was made to formulate a thickened composition for the oxidative dyeing of hair which contains an oxidation dye precursor, coupler, direct dye, cationic polymer and cetyl hydroxyethylcellulose nonionic amphiphilic polymer as claimed, wherein each component is present in optimum amounts, and wherein the composition is mixed with a hydrogen peroxide oxidant and is applied to hair as claimed, because such compositions and processes fall within the scope of those taught by Dubief. Particularly, Dubief teaches that the oxidative hair dyeing compositions may be in thickened form, and teaches NATROSOL PLUS, which is cetyl hydroxyethylcellulose, as a preferred thickener, therefore, motivating those skilled in the art to select this specific thickener for use in a thickened hair dyeing composition.

Optimization of the amount of nonionic amphiphilic polymer added to such compositions would

have been obvious to those skilled in the art in order to obtain the most effective thickening and hair dyeing results, (e.g. an amount which provides easy mixing and prevents dripping from the hair). See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

With respect to difference (2), it would have been obvious to one of ordinary skill in the art to package Dubief's two-part compositions in multicompartment kits because Dubief suggests such kits by teaching separate oxidant- and dye-containing compositions prior to application. The Office holds the position that the claimed compositions and processes which contain and use the nonionic amphiphilic polymer in both the dye- and oxidant-containing compositions are patentably indistinct from Dubief's compositions because equivalent hair dyeing results would be obtained with Dubief's two-part composition, i.e., the application of an oxidation base, coupler, nonionic amphiphilic polymer and oxidant to the hair, absent a showing otherwise.

(11) Response to Argument

The Appellant Argues

1. Claim 47, as amended, is not indefinite under 35 U.S.C. 112, second paragraph and Appellant asks that it be withdrawn.
2. With respect to the rejection of claim 30-34 and 37-71 over Dubief in view of the International Cosmetic Ingredient Dictionary, Appellant argues the following:

A. No *prima facie* case of obviousness has been established. Appellant argues that Dubief's compositions are useful for many purposes, generally referred to throughout Dubief as the "treatment and protection of hair," only one of which is the dyeing of hair. Appellant also argues that thickening agents are disclosed as optional additional ingredients, but in a different portion of the reference, which does not specifically refer to dyeing compositions. Further, Appellant argues that the thickening agents are disclosed via a series of laundry lists, and that there is nothing in Dubief that would have motivated one of ordinary skill to use any particular thickener with any given composition, let alone an oxidation dye composition.

B. Dubief teaches away from the presently claimed invention. Appellant argues that Dubief's only dyeing example (Example 6) is already in thickened cream form, and that Dubief teaches by example that its oxidative dyeing compositions do not require additional thickening agents and therefore there is no motivation in the reference to add any thickener, let alone NATROSOL PLUS®.

C. The unpredictability of the art does not provide the necessary reasonable expectation of success in modifying Dubief. Appellant argues that those skilled in the art know that the selection of an agent capable of properly thickening an oxidative hair dye composition is an unpredictable business as illustrated by several documents of record, particularly U.S. Patent No. 4,776,855 to Pohl et al (Pohl), U.S. Patent No. 5,393,305 to Cohen et al. (Cohen), and U.S. Patent No. 5,376,146 to Casperson et al. (Casperon), hence, there simply would have been no reasonable probability of success at the time of Appellant's invention to use the thickening agents of the claimed invention in Dubief's oxidative hair dye compositions. Appellant argues that although Pohl, Cohen and Casperson discuss the use of **anionic** associative polymers and the

present claims recite **nonionic** associative polymers, their disclosure demonstrate the broader proposition that not all polymers are equivalent and argues that one of skill in the art would not have had a reasonable expectation of success by using nonionic associative polymers in an oxidative hair dyeing composition of Dubief because of the unpredictability associated with the selection of thickeners.

The Examiner's Response

1. The rejection of claim 47 under 35 U.S.C. 112, second paragraph is withdrawn in view of Appellant's amendment.

2. The examiner respectfully disagrees with argument 2A because of the following reasons. Dubief teaches compositions for the treatment and protection of hair, containing, in a cosmetically acceptable medium, at least one ceramide and/or glycoceramide and one cationic polymer in the abstract and col. 1, lines 7-11. Dubief also teaches that the compositions can contain thickening agents like NATROSOL PLUS® (i.e., cetyl hydroxyethylcellulose as evidenced by *International Cosmetic Ingredient Dictionary*) in col. 8, lines 36-45, and that the compositions may be used for the dyeing of keratinous fibers such as hair, in which case they contain oxidation dyes in col. 9, lines 18-25 and col. 10, lines 60-62. It is well settled that a prior art reference is relevant for all that it teaches to those of ordinary skill in the art, see *In re Fritch*, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1782 (Fed. Cir. 1992). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments, see *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10

USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). Hence, Dubief teaches using all the ingredients claimed.

With respect to the thickening agents being disclosed via a series of laundry lists as argued by Appellant, the list of thickening agents in col. 8, lines 36-47 is still a reasonable number. Thus, a person of ordinary skill in the art would have selected NATROSOL PLUS® (cetyl hydroxyethylcellulose), in its optimum proportion, as the specific thickening agent because Dubief teaches that the composition can be in the form of thickened liquids, gels or creams (see col. 9, lines 33-34) and NATROSOL PLUS® is one of the selections in Dubief which will provide the most beneficial thickening effect, absent a showing otherwise. Appellant has not provided any showing of criticality with NATROSOL PLUS® as compared to the closest prior art, that is, to Dubief. As to the optimization of results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness, see *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

3. The examiner respectfully disagrees with argument 2B because of the following reasons. Even though Dubief's Example 6 does not contain an additional thickening agent, a reference is not limited to working examples, see *In re Fracalossi*, 215 USPQ 569. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments, see *In re Susi*, 440 F.2d 442, 169, USPQ 423 (CCPA 1971). Dubief

teaches that the composition may be used for the dyeing of keratinous fibers such as hair, in which case they contain oxidation dyes in col. 9, lines 18-25 and col. 10, lines 60-62, and that the composition can contain thickening agents like NATROSOL PLUS® in col. 8, lines 36-45. As stated above, it is well settled that a prior art reference is relevant for all that it teaches to those of ordinary skill in the art, see *In re Fritch*, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1782 (Fed. Cir. 1992). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments, see *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). Hence, Dubief describes using all the ingredients claimed and does not teach away from the presently claimed invention.

4. With respect to argument 2C, the Examiner acknowledges Appellant's remarks regarding Pohl, Cohen and Casperson patents, which are references listed by Appellant in the Information Disclosure Statement. These references, however, are not relied upon in any previous office actions. As acknowledged by Appellant, each of these references teaches **anionic** polymers in oxidative hair dyeing, not the recited **nonionic** amphiphilic polymers. Hence, Appellant's arguments with respect to Paul, Cohen and Casperson are not germane to the issues of the present application. As repeatedly stated above, Dubief teaches compositions for the treatment and protection of hair, like oxidative hair dyeing, which can contain thickening agents like NATROSOL PLUS®. Hence, one of ordinary skill in the art would have been led to use the nonionic associative polymers such as NATROSOL PLUS® in an oxidative hair dyeing

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composition as taught by Dubief, motivated by a reasonable expectation of successfully forming an effective thickened oxidative hair dyeing composition.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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LMD
January 25, 2004

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